

REMARKS

Claims 1-15 and 29-38 are pending in this matter. The Examiner has indicated that claims 1-12 are allowable in their present form. Applicant thanks the Examiner for this indication of allowable subject matter.

Applicant also thanks the Examiner Saleh Najar for his courtesy and cooperation in setting up and participating along with the undersigned in a telephonic interview which took place on November 24, 2003. Claims 13 and 14 were discussed. No agreement was reached.

Applicant has cancelled non-elected claims 23-28 in this response. An amendment is also made to claim 14 to correct a typographical error.

Applicants respectfully submit that the attached amendments and remarks fully address the issues raised in the Office Action and respectfully request a complete reconsideration of the captioned application in view of the following remarks and amendments

Rejections Under 35 U.S.C. §§ 102

Claims 13-15 and 29-38 were rejected under 35 USC 102(e) as being anticipated by Rabinovich (U.S. 6,484,204). Applicants respectfully disagree, for the reasons set forth below.

Claim 13 was rejected by the examiner over Rabinovich in part on the Examiner's conclusion that Rabinovich discloses that clients are anticipated to request content from a server residing within their geographic region. (See page 2 of the office action). Applicants believe that there is no express or implicit teaching in Rabinovich about selecting the location of clients likely to request the content nor is it reasonable to infer such a suggestion from the context. Because Rabinovich generally relates to selecting host servers by distributing actual requests for an object among replicas of the requested object (6:1-6), any techniques described in responding to actual requests do not involve predicting locations of clients not currently requesting the content as required by the limitations of claim 13.

In specific, in rejecting claim 13, the Examiner relied on Rabinovich's discussion relating to the use of affinity values to take into account the geographic factors in the location of the requestor in relation to the host that stores the replica (7: 27-32). Scrutiny of the passage in context reveals that the discussion pertains to the use of an affinity value to adjust a requestor metric. In other words, the discussion relates to determining which host (currently storing the

content) to assign an actual request. It does not relate to the prediction of the location of a client not currently requesting the content but likely to access the content. In further detail, a request distributor assigns the request to a host based upon a request metric (e.g., a count of the number of requests for the object made by the request distributor to the host) and distance metric (e.g., the cost of communicating between the requestor and the host. (7: 30-38). The request distributor assigns a host that stores the replica to respond to the request based on the request metric and distance metric of the host in relation to the similar metrics of the other hosts that also store replicas of the object. (7:39-44). Thus, this passage doesn't suggest predicting the location of at least one client not currently requesting the content but merely determines which host to assign an actual request to, a determination potentially based on a geographically adjusted request metric. The method recited by the claim at issue including predicting the location of a client not currently requesting the content and loading the content to either a first or second server based on a proximity determination provides advantages not available in the methods taught or suggested in the art of record. For example, according to one embodiment, by predicting locations of such clients, better management of content can be achieved before changes in client demand result in problems meeting client demands.

Rabinovich is further distinguishable in its teachings as to the nature of the host. Whether Rabinovich is discussing selecting a server to fill a client request or migrating content from one secondary source to another, Rabinovich teaches that at least one of the servers considered must already contain the content. For example, in evaluating the distance metrics with respect to migration of objects, Rabinovich teaches only looking at a first host (already containing the content) and a second host that doesn't store the content but is a candidate to so store it. Hence, for at least these reasons, Rabinovich fails to teach or suggest all elements of the method of loading content to a server in anticipation of the need for the content as recited in claim 1, including determining a first proximity between the client or group of clients and a first server not currently storing but capable of storing and serving the content; determining a second proximity between the client or group of clients and a second server not currently storing but capable of storing and serving the content; and based upon the relative values of the first and second proximities, loading the content into one of the first and second servers.

Thus, Rabinovich fails to teach or suggest all elements of claim 13. For at least the same reason, applicant submits that Rabinovich fails to teach or suggest the elements of claim 36. That is, in discussing selecting a server to fill a client request or migrating content from one

secondary source to another, Rabinovich teaches that at least one of the servers considered must already contain the content.

Claims 14 and 29 are submitted to be allowable at least based on the failure of Rabinovich to teach or suggest all of the elements of the respective claims, including determining at least one of the first and second proximities based on at least one of the factors of congestion, noise and loss on a network segment, and charges incurred to send, the factors weighted based on the type of content to be loaded. Rabinovich makes no teaching in cols. 7, 8, or 21 that determines the weighting of any measure of proximity as a function of the type of content. Instead, Rabinovich merely describes a distance metric in general terms and some example factors but not the weighting of the factors or the weighting as a function of the type of content. Thus, for at least these reasons, the art of record fails to teach or suggest all of the elements of claim 14. For these same reasons, applicants submit that claim 29 is in allowable form.

Claims 15, 30-35 and 37-38 are dependant claims, depending respectively from independent claims 14, 29, and 36. Thus, at least due to these dependencies, the dependent claims are submitted to be in allowable form. Further, the dependent claims recite additional elements which when taken in the context of the claimed invention further patentably distinguish the art of record. The additional limitations recited in the dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claims. Withdrawal of the rejections is respectfully requested.

Conclusion

Accordingly, it is submitted that all issues in the Office Action have been addressed, and withdrawal of the rejections is respectfully requested. Applicant believes that this application is in condition for allowance, and requests a prompt passage to issuance. If the Examiner believes that a telephone conference would expedite the prosecution of this application, he is invited to contact the Applicant's undersigned attorney at the telephone number set out below.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP



Russell N. Swerdon
Registration No. 36,943

P.O. Box 778
Berkeley, CA 94704-0778
(510) 843-6200